Activity Overview:

In the Appalachian Mountains, every family grew their own food in a garden each year. Foods like corn, beans, okra, and potatoes, were raised by everyone. However, people could not go to their local garden department and pick up plants to put in the ground, because stores did not exist! Instead, families would keep seeds each year from the plants they raised to grow the following year. This is known as seed saving. To grow their own plants, they would wait until the weather was warm enough in spring—usually around mid to late April—then put the seeds in the ground and wait for them to grow! In this activity, you’ll start your own seeds and watch the changes that happen as a plant begins to grow!

What you’ll need:

- 3-5 bean, pea, or corn seeds
- Paper towels or cotton balls
- Plastic Ziploc bag or mason jar with lid
- Water

Step One:

Gather your materials. In this example, we’ll be using a mason jar, but you can use a Ziploc bag in the same way!

Step Two:

Fill the bottom half of your jar with wadded paper towels or cotton balls.

Step Three:

Put enough water in your jar or bag to thoroughly wet the paper towels. Be careful not to add too much water! If you see standing water, pour it off. Too much water can drown a seed.
**Step Four:**

Sprinkle your seeds around the jar. Make sure they get tucked under edges of the paper towels, or into some of your cotton balls. For better viewing, try to place them close to the sides of jar.

![Image of seeds in a jar](image1)

**Step Five:**

Close up the bag or put plastic wrap over the mouth of your jar (this will create a greenhouse effect). Place in a warm, sunny spot and watch them grow!

![Image of jar with plastic wrap](image2)
Optional activities for more learning opportunities:

- Keep a daily log of your observations and, once seedling begins to sprout, take and record measurements each day. After 10 days, make a chart of its growth. Did it grow slower or faster than you expected it to?
- Once seed has germinated and begins to grow rapidly, transplant to small container with soil. If planted directly outside, it might experience transplant shock if not healthy enough.
  - Don’t have a planter? Save your egg shells and egg carton. Find an egg shell that’s roughly broken in half, fill it will a little bit of soil from outside, and plant your sprout. Keep the shell planter in your egg carton so that it stays upright. Water and watch as your seedling continues to grow. Once it’s about to outgrow the shell, plant the whole thing in the ground outside!
- Try growing different types of seeds in different jars at the same time. Make notes of daily observations and compare and contrast. Measure each plant every day and after 10 or 15 days, create growth charts for each. Which plant grew fastest? Which grew the slowest? If you were planting your garden, what seed would you plant first?
- Answer the following questions:
  - Where did you keep your seedlings? Do you think this environment helped or hurt the growth of your seed? Where would be the best place for a young seed to grow? Why do you think so?
  - What surprised you the most about your seed’s journey?
  - Did all of your seeds germinate? If some did not, list possible reasons for why they didn’t grow.
  - Draw a picture of your sprouted seedling. With an adult’s help, do some extra research on seeds and plants. Can you label the parts of the plant?
  - How many days did it take for your seed to germinate? Do you think this would be the same amount of time if you planted it outside in the ground? If you have the space, plant a seed outside in soil and test your hypothesis!
  - Why do you think people in the mountains grew beans?